



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,305	09/23/2003	Nobuyuki Satoh	243012US2	9273

22850 7590 12/14/2005

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

PHAM, HAI CHI

ART UNIT	PAPER NUMBER
----------	--------------

2861

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/667,305

Applicant(s)

SATO, NOBUYUKI

Examiner

Hai C. Pham

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1:

- The following limitation “draw a reference position mark alongside the moiré stripes” at line 10 appears to be vague in that it would require a plurality of the reference position marks since a plurality of moiré stripes are formed.

Claim 2:

- The following limitation “computes an amount of position of the light beams ... in response to comparison between position of the moiré stripes and position of the reference position mark” appears to be misleading in that it suggests that the plural moiré stripes are compared to a single reference position mark. The shift of each of the black stripes is determined by comparing the position of each of the moiré stripes with the position of the corresponding reference position mark, e.g., reference position marks 45 as shown in Fig. 7. In other words, it requires a plurality of reference positions marks in order to carry out the correction of the position of the light beams.

Claim 3:

- Similarly, the following limitation “adjusts the position of the light beams ... according to comparison between position of the moiré stripes and position of the reference position mark” appears to be misleading in that it suggests that the plural moiré stripes are compared to a single reference position mark. The shift of each of the black stripes is determined by comparing the position of each of the moiré stripes with the position of the corresponding reference position mark, e.g., reference position marks 45 as shown in Fig. 7.

Claim 8:

- Similarly, the following limitation “adjust positions of the light beams ... according to a comparison between a position of the moiré stripes and a position of the reference position mark” appears to be misleading in that it suggests that the plural moiré stripes are compared to a single reference position mark. The shift of each of the black stripes is determined by comparing the position of each of the moiré stripes with the position of the corresponding reference position mark, e.g., reference position marks 45 as shown in Fig. 7.

Claim 9:

- The following limitation “draw a reference position mark alongside the moiré stripes” at line 10 appears to be vague in that it would require a plurality of the reference position marks since a plurality of moiré stripes are formed.

Claim 10:

- The following limitation “computing an amount of correction of position of the light beams ... in response to comparison between position of the moiré stripes and

position of the reference position mark” appears to be misleading in that it suggests that the plural moiré stripes are compared to a single reference position mark. The shift of each of the black stripes is determined by comparing the position of each of the moiré stripes with the position of the corresponding reference position mark, e.g., reference position marks 45 as shown in Fig. 7.

Claim 11:

- Similarly, the following limitation “adjusting position of the light beams ... according to comparison between position of the moiré stripes and position of the reference position mark” appears to be misleading in that it suggests that the plural moiré stripes are compared to a single reference position mark. The shift of each of the black stripes is determined by comparing the position of each of the moiré stripes with the position of the corresponding reference position mark, e.g., reference position marks 45 as shown in Fig. 7.

Claim 16:

- The following limitation “adjusting the positions of the light beams ... according to a comparison between a position of the moiré stripes and a position of the reference position mark” appears to be misleading in that it suggests that the plural moiré stripes are compared to a single reference position mark. The shift of each of the black stripes is determined by comparing the position of each of the moiré stripes with the position of the corresponding reference position mark, e.g., reference position marks 45 as shown in Fig. 7.

Claims 4-7 and 12-15 are dependent from claims 2 and 10 above and are therefore indefinite.

Art Unit: 2861

Appropriate correction is required.

Pertinent Prior Art

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shimizu et al. (JP 10-115955) discloses a positional deviation detecting method for detecting and correcting the positions of the light beams in the main and sub-scanning directions based on the detection of the moiré stripes formed between slanted lines.

Shimada et al. (U.S. 6,310,637) discloses a method for printing test patterns having two sets of parallel lines inclined with respect to each other to create moiré stripes for adjusting the print timing with a high accuracy.

Response to Arguments

4. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new grounds of rejection.

Response to Arguments

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai C. Pham whose telephone number is (571) 272-2260. The examiner can normally be reached on M-F 8:30AM - 5:30PM.

Art Unit: 2861

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Talbott can be reached on (571) 272-1934. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



HAI PHAM
PRIMARY EXAMINER
December 6, 2005